

In the Claims:

1. (Currently amended) An optoelectronic component (1) having a semiconductor arrangement (4) which emits and/or receives electromagnetic radiation and which is arranged on a carrier (22) which is thermally conductively connected to a heat sink (12), and having external electrical connections (9) which are connected to the semiconductor arrangement (4),

~~characterized in that wherein~~

the external electrical connections (9) are arranged in electrically insulated fashion on the heat sink (12) at a distance from the carrier (22).

2. (Currently amended) The optoelectronic component as claimed in claim 1,

~~characterized in that wherein~~

the carrier contains a carrier substrate (2) and at least one electrically insulating layer (14) arranged thereon.

3. (Currently amended) The optoelectronic component as claimed in claim 1 or 2,

~~characterized in that wherein~~

the semiconductor arrangement (4) and the electrically insulating layer (14) have an electrically conductive layer (13) arranged between them which is connected to one of the external electrical connections (9).

4. (Currently amended) The optoelectronic component as claimed in claim 1 one of claims 1 to 3,

~~characterized in that~~ wherein

the semiconductor arrangement contains a semiconductor chip.

5. (Currently amended) The optoelectronic component as claimed in claim 1 one of claims 1 to 4,

~~characterized in that~~ wherein

the external electrical connections (9) include conductor tracks on a printed circuit board.

6. (Currently amended) The optoelectronic component as claimed in claim 1 one of claims 1 to 5,

~~characterized in that~~ wherein

conductor tracks on different printed circuit boards arranged above one another can be connected to one another by means of plated-through holes.

7. (Currently amended) The optoelectronic component as claimed in claim 2 one of claims 2 to 6,

~~characterized in that~~ wherein

the carrier substrate (2) has at least one material with good thermal conductivity from the group comprising Si, diamond-coated Si, diamond, SiC, AlN and BN.

8. (Currently amended) The optoelectronic component as claimed in claim 1 one-of
~~claims 2 to 7,~~

characterized in that wherein

the electrically insulating layer (14) comprises SiO₂.

9. (Currently amended) The optoelectronic component as claimed in claim 1 one-of
~~claims 1 to 8,~~

characterized in that wherein

the semiconductor arrangement (4) is attached to the carrier (22) by means of a metal solder or a thermally and/or electrically conductive adhesive.

10. (Currently amended) The optoelectronic component as claimed in claim 1 one-of
~~claims 1 to 9,~~

characterized in that wherein

the carrier (22) is attached to the heat sink (12) by means of a metal solder or a thermally conductive adhesive.

11. (Currently amended) The optoelectronic component as claimed in claim 1 one-of
~~claims 1 to 10,~~

characterized in that wherein

the semiconductor arrangement (4) and the carrier (22) are arranged in the cavity (3) of a basic housing (20).

12. (Currently amended) The optoelectronic component as claimed in claim 11,

characterized in that wherein

the cavity (3) of the basic housing (20) contains precisely one semiconductor arrangement (4).

13. (Currently amended) The optoelectronic component as claimed in claim 11 or ~~12~~,

characterized in that wherein

the basic housing (20) is formed at an angle on the inner side (17) which faces the semiconductor arrangement (4), so that the basic housing (20) has a reflective area for a portion of the radiation emitted by the semiconductor arrangement (4).

14. (Currently amended) The optoelectronic component as claimed in claim 11 ~~one of claims 11 to 13~~,

characterized in that wherein

the cavity (3) between the semiconductor arrangement (4) and lateral walls (17) of the cavity contains a reflective filling compound (6) which, as seen from the semiconductor arrangement (4) toward the front (21) of the basic housing (20), has a ~~concave~~ curved surface (30) which forms a reflective area for a portion of the radiation.

15. (Currently amended) The optoelectronic component as claimed in claim 1 one of
~~claims 1 to 14,~~

~~characterized in that~~ wherein

the filling compound contains TiO₂ or an epoxy resin filled with TiO₂ particles.

16. (Currently amended) The optoelectronic component as claimed in claim 1 one of
~~claims 1 to 15,~~

~~characterized in that~~ wherein

the semiconductor arrangement (4) is at least partly encapsulated by a radiation-pervious encapsulation compound (6).

17. (Currently amended) The optoelectronic component as claimed in claim 11 one of
~~claims 11 to 16,~~

~~characterized in that~~ wherein

at least some of the external connections (9) are arranged between the basic housing (20) and the heat sink (12).

18. (Currently amended) The optoelectronic component as claimed in claim 11 one of
~~claims 11 to 17,~~

~~characterized in that~~ wherein

it is provided for an electrical power consumption of at least 0.5 W.

19. (Currently amended) The optoelectronic component as claimed in claim 11 one of claims 11 to 18,

~~characterized in that wherein~~

it is provided for an electrical power consumption of at least 1 W.

20. (Currently amended) The optoelectronic component as claimed in claim 11 one of claims 11 to 19,

~~characterized in that wherein~~

it is provided for an electrical power consumption of at least 3 W.

21. (Currently amended) The optoelectronic component as claimed in claim 11 one of claims 11 to 20,

~~characterized in that wherein~~

it has a base area of no more than 1 cm².

22. (Currently amended) A component-based module,

~~characterized in that wherein~~

it has a plurality of optoelectronic components (1) as claimed in claim 1 one of claims 1 to 21.

23. (Currently amended) A component-based module having a plurality of optoelectronic components as claimed in claim 1 one of claims 1 to 21,

~~characterized in that wherein~~

at least some of the optoelectronic components are electrically conductively connected to one another by conductor tracks.

24. (Currently amended) The component-based module as claimed in claim 22 or 23,

~~characterized in that wherein~~

the individual optoelectronic components (1) are arranged in the form of a matrix and at least some of them are connected in series.

25. (Currently amended) The component-based module as claimed in claim 22 one of claims 22 to 24,

~~characterized in that wherein~~

a plurality of optoelectronic components (1) each have a basic housing (20).